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a plurality of heating stations on the platform, each heating station adapted to support at least one microscope slide bearing biological samples; and  
electronic control for heating the individual heating surfaces [to individual temperatures].

Please add the following new claims:

5. A microscope slide stainer with random access slide staining capability comprising:  
a moving platform adapted to carry microscope slides, said moving platform having dispensing stations for adding liquid reagent to and removing liquid reagent from said slides;  
a first heating element positioned on the moving platform, said first heating element adapted to be located immediately adjacent at least one microscope slide and having a first electrical power connection;  
a second heating element positioned on the moving platform, said second heating element adapted to be located immediately adjacent at least one microscope slide and having a second electrical power connection, said electrical power connections of said first and second heating elements being distinct from each other;  
a motor drive capable of indexing said microscope slides adjacent to said dispensing station; and  
electronic control for heating the heaters.
6. A microscope slide stainer as claimed in claim 5 further comprising a first temperature sensor, said first sensor positioned in juxtaposition to said first heating element for the purpose of sensing the temperature of said first heating element, and a second temperature sensor, said second sensor positioned in juxtaposition to said second heating element for the purpose of sensing the temperature of said second element.
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A microscope slide stainer as claimed in claim 5 further comprising a receptacle for each slide adapted to mechanically retain said microscope slide in a fixed position with respect to the moving platform.
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11. A microscope slide stainer as claimed in claim 8 wherein each of the first and second heating elements is integrally formed in a slide frame base which underlies the at least one microscope slide.

12. A microscope slide stainer as claimed in claim 8 wherein each of the heating elements is below a surface which supports a single microscope slide.

10. A method of staining microscope slides with random access to any slide, comprising:
- positioning at least two microscope slides on a moving platform, said moving platform being capable of movement so as to position said microscope slides adjacent to dispensing stations for the addition of liquid reagent to and removal of liquid reagent from the surface of said microscope slide;
  - heating a first microscope slide by providing electrical power to a first heating element located immediately adjacent said first microscope slide;
  - heating a second microscope slide by providing electrical power to a second heating element located immediately adjacent said second microscope slide, said first and second heating elements having distinct electrical connections for the supply of electricity.
11. A method of staining microscope slides as claimed in claim 10 further comprising sensing the temperature of a first heating element through use of a first temperature sensor and sensing the temperature of a second heating element through the use of a second temperature sensor.
12. A method of staining microscope slides as claimed in claim 10 wherein each of the first and second heating elements is integrally formed in a slide frame base which underlies the microscope slide.
13. A method of staining microscope slides as claimed in claim 10 wherein each heating element heats a single microscope slide.